

April 17, 2023

ELECTRONICALLY FILED
Monday, April 17, 2023
TR2337580
ALABAMA PUBLIC SERVICE COMMISSION
WALTER L. THOMAS, JR., SECRETARY

Mr. Walter L. Thomas, Secretary
Alabama Public Service Commission
100 North Union Street, Suite 850
Montgomery, Alabama 36104

Re: Docket 31555- Modification of O'Brien Environmental Services
LLC's Certificate of Financial Viability

Dear Mr. Thomas;

Please accept for filing the attached Application for Modification of O'Brien Environmental Services LLC's Certificate of Financial Viability to add Lakemont Village Phase I. The system will serve 78 houses with an average output of 17550 gpd. The system is located in St. Clair County, Alabama pursuant to Alabama Public Service Commission Wastewater Rule WW-3{3}.

If you have any questions, please do not hesitate to contact me at 205-601-0549.

Sincerely,



Randy Cantrell

Partner

O'Brien Environmental Services LLC

2023

DOCKET 31555

APPLICATION TO
ALABAMA PUBLIC SERVICE COMMISSION

FOR

MODIFICATION OF
O'BRIEN ENVIRONMENTAL SERVICES LLC
CERTIFICATE OF FINANCIAL VIABILITY

ADDING

LAKEMONT VILLAGE SUBDIVISION – PHASE 1
TOWNSHIP 18 SOUTH AND RANGE 3 EAST
ST. CLAIR COUNTY, AL

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INTRODUCTION

O'Brien Environmental Services LLC ("OBES") is seeking a modification of its Certificate of Financial Viability to own, operate, and maintain an 18,000 GPD Wastewater Treatment Facility to serve 78 lots for residential single-family homes. To that end, we are submitting herein the information necessary for said modification pursuant to PSC wastewater rule WW-3(3) for our anticipated operation of the Lakemont PH1 Subdivision wastewater treatment facility. OBES further requests that the Commission consider a Commission Order approving the modification of its certificate to add Lakemont PH1 Subdivision and to approve recovery of any transaction cost, if any, including title cost, environmental cost and insurance costs, in rate base.

Lakemont PH1 Subdivision wastewater system will accommodate 78 residential single-family homes located in St. Clair County Alabama ay Township 18 South and Range 3 East St Clair County, Alabama. There are currently a total of 78 proposed lots. Adequate land is available for additional phases at this site.

Based on an analysis of existing conditions and the current available wastewater technology it was concluded that a decentralized system utilizing a re-circulating gravity filter and a drip line soil's disposal field would be cost effective and should be used. The soils in the propose effluent dispersal area were analyzed and characterized to determine their ability to disperse the injected treated effluent. A phase I hydrogeology study of the project disposal area was performed to determine soil loading rates.

Section I

Application Fee

Rule WW-3(3) (excerpt)

"...Applications for Modification of an Existing Certificate of Financial Viability may encompass multiple systems for the required filing fee of \$300.00. Such Applications for Modification must include all of the information required by 770-X-9-.03(2) that has not been previously provided to the Commission. Modification of an existing Certificate of Financial Viability shall be mandatory before a new operating permit is issued by ADEM or ADPH or before an operating permit is modified by ADEM or ADPH."

This application is being filed electronically. An original and one copy are being sent under separate cover with a check in the amount of three hundred dollars (\$300.00) for the modification fee.

Section II

Name and Address of Applicant

RULE WW-3(2)(c)(I):

Full and accurate name and address of the applicant

O'Brien Environmental Services LLC (sometimes referred to herein as "OBES")

Mailing Address

O'Brien Environmental Services
LLC
101 Emerald Court
Riverside, AL 35135

Phone Number

(205) 601-0549

Email:

Crossenterprises0729@yahoo.com Partner

Randy Cantrell

Section III

Character of the Organization

RULE WW-3(2)(c)(2):

Character of the organization; e.g., corporation, LLC, partnership, or individual proprietorship

Entity ID	<u>301-586</u>
Entity Type	Domestic Limited Liability Company
Principle Address	101 Emerald Court, Riverside, AL 35135
Place of Formation	Birmingham, AL 35203
Formation Date	9-3-2010
Registered Agent Name	Paul Z. Rothstein
Registered Office Street Address	2001 Park Place Ste 1400, Birmingham, AL 35203
Registered Office Mailing Address	2001 Park Place Ste 1400, Birmingham, AL 35203

Section IV

Proposed Tariffs

RULE WW-3(2)(c)(3)

Proposed tariff showing all rates, classifications and charges for service of every kind furnished or to be furnished and all Rules and Regulations.

OBES's approved tariff rules and regulations, with an effective date of June 24, 2022 are on file with the PSC as renewed on April 4, 2023 in Docket #31555.

Section V

Rate Worksheets

RULE WW-3(2)(c)(4):

Worksheets for rates, detailing the data and calculations used to arrive at such rates which must be cost-based.

OBES will use the current rate structure within approved tariff dated June 24, 2020 and reserve the right to adopt any approved future tariff changes as ordered. The PSC approved

rate base should include operating the proposed plant plus any transaction costs including title cost, environmental work and insurance costs, along with any future capital additions, see Section IX, will be included in OBES rate base for rate making purposes in future filings.

Section VI

Detailed Description of Proposed Service Area

RULE WW-3(2)(c)(5):

Detailed description of proposed service area including service area map.

A copy of the proposed service area for Lakemont PH1 Subdivision is attached as Exhibit VI.

Section VII

Description of Wastewater Systems

RULE WW-3(2)(c)(6):

Detailed description of the wastewater system(s) including a description of the collection system(s) and the treatment facility(s).

Lakemont PH1 Subdivision shall have an onsite sewage treatment system. See Exhibit VII for a detailed description of the wastewater system including a description of the collection system and the treatment facility.

Section VIII

Franchise Agreements and/or Municipal Approvals

RULE WW-3(2)(c)(7):

Copy of franchise agreement(s) and/or approval(s) of municipal authorities (or county permits).

OBES understands from Lakemont PH1 Subdivision there are no franchise agreements required for the operation of the Lakemont PH1 Subdivision wastewater treatment system.

Section IX

Estimated Cost of Proposed Construction

RULE WW-3(2)(c)(8):

Estimate of the cost of proposed construction.

All costs of the system construction are to be borne by the Developer and there will be no cost of construction for OBES. The cost of the infrastructure is projected to be \$624,000.00

Section X

Draft Operational Permit Numbers

RULE WW-3(2)(c)(9):

Draft operational permit number(s)

OBES will apply for ADPH or ADEM permit for the Lakemont PH1 Subdivision wastewater system after PSC approval.

Section XI

Records & Reports

RULE WW-3(2)(c)(10):

All documents pursuant to 770-X-9-.06 ...

OBES's (docket #31555) Certificate of Financial Viability was originally approved by order of the PSC June 24, 2020 and subsequently renewed by order of the PSC on April 4, 2023. OBES's Annual Report was filed with the Secretary on March 6, 2023.

Section XII

Financial Assurance

RULE WW-3(2)(c)(10):

All documents pursuant to ... 770-X-9-.07

PSC Admin. Code R. 770-X-9-.07

Each ME shall obtain financial security in the form of a surety bond or irrevocable letter of credit in an amount equal to fifty percent (50%) of the ME's gross wastewater plant with a maximum required amount of \$300,000. The bond or letter of credit shall contain a provision which renders the full amount available to the Commission upon the presentation of a Commission Order which states that the Commission is taking possession of the wastewater system in accordance with Ala. Code § 22-25B-1 et seq. Upon request, the Commission will provide a sample bond and letter of credit which meet the requirements of these rules. If a ME proposes to post financial security other than the type or amount permitted here, it must file a separate petition with the Commission and obtain PSC approval for such other financial security.

OBES's bond in the amount of \$300,000 is on file with the PSC.

Section XIII

Estimated Annual Revenue for First 5 Years

	5 Year Revenue Projections				
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Years</u>
Customer Base	0	20	40	60	78
Current Rate	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00
Annual Revenue	\$ 0.00	\$ 10,800.00	\$ 21,600.00	\$32,400.00	\$43,200.00

Section XIV

Copies of Operators' Licenses

RULE WW-3(2)(c)(12):

Copies of operators/installers licenses.

Lakemont PH1 Subdivision will require no additional operators. The licenses for all current OBES operators are on file with the PSC.

Section XV

Copies of Contracts Pertaining to Wastewater Systems

RULE WW-3(2)(c)(13):

Copies of all contracts pertaining to wastewater system(s) to which the ME is a party.

Developer agreement pending.

Section XVI

Copies of Deeds

RULE WW-3(2)(c)(14):

Copies of all relevant deeds.

Area associated with the disposal and plant site will be conveyed by the developer to OBES.

Section XVII

Copies of All Compliance Enforcement Documents

RULE WW-3{2}{c}{15):

Copies of all regulatory compliance enforcement documents received by applicant in the last two years.

OBES has received no regulatory compliance violations within the past two years.

Section XVIII

Proof of Insurance

RULE WW-7(3):

Each ME shall provide proof of general commercial, pollution, and environmental liability insurance in the amount of \$2,000,000 general aggregate.

OBES's Certificate of Insurance is on file with the PSC.

[Signature on the following page]

Respectfully submitted this 14th day of April, 2023

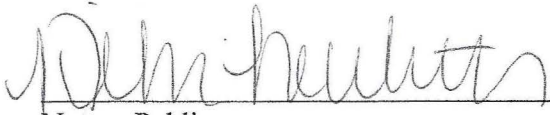
O'Brien Environmental Services, LLC

By: 

Randy Cantrell, Partner

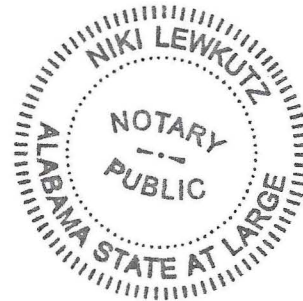
I, the undersigned, a notary public in and for said county and state, hereby certify that Randy Cantrell, whose name as Partner of O'Brien Environment Services, LLC, an Alabama limited liability company, is signed to the foregoing Request for Modification of Certificate of Financial Viability of Wastewater Management Entity and who is known to me, acknowledged that, being informed of the contents of said application, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation.

Given under my hand and seal this 17th day of April, 2023



Notary Public

My Commissioner Expires: 5-27-24



(SEAL)

EXHIBITS TO

MODIFICATION OF
O'BRIEN ENVIRONMENTAL SERVICES LLC
CERTIFICATE OF FINANCIAL VIABILITY

ADDING
LAKEMONT VILLAGE SUBDIVISION – PHASE 1
TOWNSHIP 18 SOUTH AND RANGE 3 EAST
ST. CLAIR COUNTY, AL

Exhibits

Exhibit VI - Preliminary Plat

Exhibit VII - Preliminary Engineering Report

EXHIBIT VI - LAKEMONT PH1 - PRELIMINARY
PLAT

ALABAMA
811



NOT FOR CONSTRUCTION

LAYOUT PLAN

LAKEMONT SUBDIVISION

VALOR COMMUNITIES, LLC

C-1.01

EXHIBIT VII - PRELIMINARY ENGINEERING REPORT

**PRELIMINARY ENGINEERING
REPORT**

ON

A COMMUNITY ONSITE SEWAGE COLLECTION AND DISPOSAL SYSTEM

LOCATED AT

LAKEMONT VILLAGE SUBDIVISION -PHASE 1

CROPWELLST, CLAIR COUNTY, ALABAMA

FOR

O'BRIEN ENVIRONMENTAL SERVICES LLC

101 EMERALD POINT
RIVERSIDE, ALABAMA 35135
(205) 601 0549

MARCH 2023

PREPARED BY:

GUTHRIE & ASSOCIATES, INC

CONSULTING ENGINEERS
3621 CHERRY BROOK RUN
BIRMINGHAM, ALABAMA 35223
(205) 901 1830

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I. General Information

This engineering report presents the facts and data on constructing a decentralized wastewater collection, treatment and disposal system proposed to serve the sewage requirements of the proposed **Lakemont Village Subdivision – Phase 1**, located off Highway 231, six mile southeast of Pell City, St Clair County, Alabama. No central gravity sewer is available for this subdivision. The proposed phase of this subdivision will consist of 78 new residential lots.

Based on an analysis of existing conditions and the currently available wastewater technology it was concluded that a decentralized system utilizing a recirculating sand filter for biological sewage treatment and a drip line disposal field would be cost effective/. The soils in the proposed effluent dispersal area were analysis and characterized to determine their ability to disperse the injected treated effluent. A phase I hydrogeology study of the project disposal area was conducted to determine soil loading rates and to determine if this proposed facility would influence the area's ground waters..

The developer of this proposed subdivision is Valor Communities, LLC, 105 Hayes bury Drive, Pelham, Alabama 35124. The contact person for Valor Communities is Rhett Loveman, his telephone number is (205) 873 2276.

II. Location of Proposed Project

Lakemont Village Subdivision – Phase 1 is in Section 3, Township 18 South and Range 3 East, St. Clair County, Alabama. The treatment area is located at Latitude: 33.500501d N and Longitude: 8.324825d W.

III. Owners and Operators

The owner and operator of the **Lakemont Village Subdivision WWTP** will be O'Brien Environmental Services LLC, 101 Emerald Point, Riverside, Alabama 35135. Randy Cantrell is a partner in the LLC.. The phone number for Mr. Cantrell is (205) 601 0519.

IV. Proposed Facilities

**General description of the proposed facility,
including design criteria that shall be used for
the design of this sewage system.**

Design Flow

The wastewater collection, treatment and disposal system shall be based on the following criteria:

1. 2.50 people per household
2. Ninety gallons per person per day of usage
3. 78 houses shall be served by the proposed facilities.

The number of people per household in the area was obtained from the Birmingham Regional Planning and Development Commission and is based on their 2000 census data.

The ninety gallons per day usage data is EPA design criteria.

The calculated Daily Design Flow For these proposed facilities is 17,550 gallons per day.

The Design Flow for this facility shall be assumed to be 18,000 gallons per day.

Wastewater Treatment

To provide primary sewage treatment, 1,000-gallon watertight interceptor (septic) tanks equipped with effluent filters shall be installed at each house. These tanks shall be installed only as the houses are built. It is extremely important that ground/surface water be kept out of the interceptor tanks to prevent excess water from reaching and causing failure of the disposal systems.

A re-circulating gravel filter (RSF) shall provide secondary treatment. Based on the design flow of 18,000 gallons per day, the minimum filter size shall be 55 feet x 65 feet in size. Normally, 80 per cent of the filter contents shall be recirculated.

The RSF shall be operated using a Programmable Logic Controller (PLC) with telemetry options. The entire system can be operated remotely if necessary.

The RSF design shall provide for incoming effluent to flow laterally through chambers and gravel layers in an anaerobic environment, with opportunity to have significant attached growth on chamber walls and gravel media. This lateral cross flow may improve the final discharge of nitrates, however at this time no data has proven this theory. The standard design allowing flow down chambers has also been retained as an option if needed in the future.

Small Diameter Pipe, Variable Grade Collection System

The lateral from each house to the septic tank shall be a four-inch Schedule 40, PVC pipe. A cleanout fitting shall be installed at the basement wall in the house lateral.

The outlet pipe from each interceptor/septic tank to the collection-piping network shall be a three-inch SDR 21 Class 200, PVC Pipe. A minimum slope of 2-inch per 100 of length minimum shall be maintained in these pipes.

The variable grade collection network shall be four-inch, SDR 21, Class 200, PVC pipe. The collection network pipes shall be installed on a downhill variable grade. Where houses do not gravity flow to the collection system, pumps will be installed in the interceptor/septic tanks.

Based on the site topographic, small remote pump stations shall be placed as needed to get the influent (sewage) to the treatment area.

Disposal Areas

Treated effluent shall be contained in the Effluent Pump Station until it is pumped to the drip disposal zones. Four-inch diameter, high head vertical turbine pumps, located in the Effluent Pump Station will be activated by floats as the water level increases in the Effluent Pump Tank. Once a pump is activated, effluent will be pumped to one of six drip zones.

The inlet pressure of the drip-field disposal system shall operate at a minimum of 40 psi.

The drip dispersal system shall use pressure-compensating dripline tubing as supplied by Netafim or approved equal. Flow orifices shall be located on 24-inch centers and shall deliver 0.61 gallons/hour/orifice.

The dispersal fields shall be designed based on a soil classification with a hydraulic loading rate capability of 0.2 gallons/square feet/day per soil classification analysis.

The drip tubing shall be installed at a depth of 10 to 12-inches.

The drip tubing shall be installed on 2-foot spacing.

The total disposal field space area required shall be ca 90,000 square feet.

The total length of drip-line tubing in the disposal area shall be ca 45,000 linear feet.

The dip field shall consist of 9 dividual zones, each zone shall contain approximately 5,000 linear feet of drip tubing.

E. Ultra-Violet Disinfection

Ultraviolet lights shall be installed to disinfect the treated effluent prior to it being pumped to the drip disposal area.

F. Effluent Flow Monitoring

Effluent flow shall be continuously monitored as it is being pumped to the disposal field.

The effluent flow shall be monitored and recorded on an instantaneous and daily basis. The flow-monitoring instrument shall be a SeaMetrics Model IP81, 2-inches in size.

G. Filtering (If needed)

Prior to the treated effluent being pumped to the disposal field it shall flow through a disc filter for particle removal.

Dual filters shall be installed with appropriate piping so that one filter is being used with an alternate available if the pressure drop across the operating filter becomes excessive. The filters shall be equipped with 140-micron screens. Operating pressure shall be measured on both the inlet and discharge sides of each filter. If the pressure drop across the filter becomes excessive the flow shall automatically switch to the other filter and the

plugged filter shall be back washed automatically.

The filters shall be two-inch ARKAL Super Filters or approved equal.

Sampling

Monthly sampling shall be done as required by the operating permit.

Effluent sampling shall be done prior to the effluent being pumped to the disposal field.

Monitoring Well/s

Ground wells, down gradient of the disposal field, shall be installed and shall be monitored and samples taken, as required by the discharge permit.

Remote Pump Station

If remote pump stations are required by the final design, each will consist of a 2,000-gallon pre-cast concrete "watertight" tank each equipped with a filter and dual high head turbine pumps. The control panels for the pump stations shall be equipped with a telemetry unit so that the station can be monitored and operated remotely.

Schematics

Figure 1 is a drawing of the proposed treatment facilities.

END OF REPORT

**Guthrie & Associates,
Inc
Consulting Engineers**

3621 Cherry Brook Run
Birmingham, AL 35223
(205) 901-1830

JOB: Lakemont Village

Subdivision - Ph 1

CALCULATIONS BY: BRG DATE:

04/05/23

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Design Criteria:

1. Number of homes in project - 78
2. Number of residents/Home - 2.5
3. Water usage per resident per day - 90 gal
4. Biological treatment provided by Re-circulating Sand Filter
5. Soil type in disposal area - Chery, Silty, Loam
6. Soil loading rate - 0.2 gal/sf/day.
7. Loading rate for the sand filter - 5 gal/sf/day
8. Project shall require disinfection -Ultra - Violet
9. Spacing of drip laterals - 2 feet on centers running with the contours
10. Spacing of drip emitters - 2 feet
11. Type of drip tubing - Pressure compensating
12. Drip emitter flow rate - 0.61 gal/hour
13. Each lateral in the drip field shall be approximately 400 feet in length.
14. Each distal end shall be flushed at a rate of 1.6 gpm
15. The pumps to supply the drip zones shall be 50 gpm vertical turbine.

Calculations:

1. Daily flow = $78 \times 2.5 \times 90 = 17,550$ gal/day

Project shall be designed based on a flow of 18,000 gal/day

2. Sand Filter Sizing = $18,000 \text{ gal/day} / 5 \text{ gal/sf/day} = 3,600 \text{ sf}$
 - a. The project shall require a filter 55 ft(wide) \times 65 ft (long)
 - b. The filter shall contain 1 1/2" dia. distribution laterals.
 - c. The recirculation tank shall be 5,000 gallons in capacity
3. Land area required for effluent disposal (Drip System)
 - a. Area Required = $18,000 \text{ gal/day} / 0.2 \text{ gal/sf/day} = 90,000 \text{ sf}$
 $90,000 / 43,560 = \text{ca } 2.1 \text{ acre}$
 - b. Total linear feet of drip tubing required for effluent disposal.
 $90,000 \text{ sf} / 2 \text{ feet/sf} = 45,000 \text{ feet (minimum)}$

Page 2 of 2

4. Drip Zone Sizing (Each Zone shall contain ca 5,000 lf of tubing)
 - a). Each drip lateral shall require a flow of:
Emitter flow = $400 \text{ feet} / 2 \text{ ft (emitter spacing)} \times 0.61 = 2.03 \text{ gpm}$
Lateral Flushing = 1.6 gpm
Total Flow Required /Lateral = 3.63 gpm
 - b) Number of Laterals per drip zone = $5,000 / 400 = 12.5$ laterals

c) Average Area of a drip zone = 12.5 laterals \times 2 ft(spacing)
X 400 ft(length) = 10,000 sf

5. Number of drip zones required

45,000 total footage/5,000 feet/zone = 9 zones approximately